

**Abstract**

[0025] A network arrangement where traffic elements of network nodes are programmable. A traffic element comprises electrically controllable transceiver pool having one or more ports that are coupled to an electrically controllable optical director that has all-optical information communication paths. The transceiver pool has one or more customer connection points in addition to the one or more connection points that connect to the optical director, and is adapted to couple a signal from any of the customer connection points to the optical director, at a particular wavelength. The choices for the specific coupling within the optical director and of the wavelengths are specified by control signals that are applied to the transceiver pool and to the optical director.